

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

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1 Cover Page

RF Exposure REPORT

Application No.:	SZEM1801000176CR (SHEM1712008629CR)				
Applicant:	Anhui Huami Information Technology Co.,Ltd.				
FCC ID:	2AC8UA1619				
	Equipment Under Test (EUT): NOTE: The following sample(s) submitted was/were identified on behalf of the client as				
Product Name:	Amazfit Stratos				
Model No.(EUT): A1619					
Standards:	FCC Rules 47 CFR §2.1093 KDB447498 D01 General RF Exposure Guidance v06				
Date of Receipt:	2017-12-15				
Date of Test:	2017-12-26 to 2018-01-23				
Date of Issue:	2018-01-26				
Test Result:	Pass*				

In the configuration tested, the EUT complied with the standards specified above.



Keny Xu EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

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Revision Record					
Version	Chapter	Date	Modifier	Remark	
00	/	2018-01-26	/	Original	

Authorized for issue by:		
	Forychon	
	Foray Chen /Project Engineer	
	Eric Fu	
	Eric Fu /Reviewer	

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3 General Information

3.1 Client Information

Applicant:	Anhui Huami Information Technology Co.,Ltd.
Address of Applicant:	Building A4, 12th Floor, No.800 Wangjiang Road, Hefei, China (230088)
Manufacturer:	Anhui Huami Information Technology Co.,Ltd.
Address of Manufacturer:	Building A4, 12th Floor, No.800 Wangjiang Road, Hefei, China (230088)
Factory:	Anhui Huami Information Technology Co.,Ltd.
Address of Factory:	Building A4, 12th Floor, No.800 Wangjiang Road, Hefei, China (230088)

3.2 General Description of E.U.T.

Power supply:	DC 3.8V by Built-in lithium-ion polymer battery (290mAH)

3.3 Details of E.U.T.

BT:

Channel Spacing	1MHz
Modulation Type	GFSK, π/4DQPSK, 8DPSK
Number of Channels	79
Operation Frequency	2402MHz to 2480MHz
Spectrum Spread Technology	Frequency Hopping Spread Spectrum(FHSS)

BLE:

Channel Spacing	2MHz	
Modulation Type	GFSK	
Number of Channels	40	
Operation Frequency	2402MHz to 2480MHz	

WiFi:

Operation Frequency:	802.11 b/g/n(HT20): 2412MHz-2462MHz
	802.11 b DSSS(CCK, DQPSK, DBPSK)
Modulation Type:	802.11 g/n(HT20) OFDM(64QAM, 16QAM, QPSK, BPSK)
Number of Channel:	802.11 b/g/n(HT20): 11
	802.11b: 1/2/5.5/11Mbps,
Data Rate:	802.11g: 6/9/12/18/24/36/48/54Mbps
	802.11n: MCS0-7
Antenna Type	Integral antenna (It is shared by WiFi & BT)
Antenna Gain:	-0.5 dBi

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3.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

• VCCI

The 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

• FCC – Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

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4 Test Standards and Limits

4.1 FCC Radiofrequency radiation exposure limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by:

[(max power of channel)/(min test separation distance)]*[$\sqrt{f}(GHz)$] \leq 3.0 for 1-g SAR and \leq 7.5 for 10-g extremity SAR, where

- f(GHz) is the RF channel transmit frequency in GHz
- · Power and distance are rounded to the nearest mW and mm
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds

The test exclusions are applicable only when the minimum test separation distance is \leq 50 mm, and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 4.1 f) is applied to determine SAR test exclusion.

The practical use condition for this device is as a limb-worn accessories. So the applicable limit is 10-g extremity SAR

For 2.4G band device, the limit of worse case is $P_{max} \le 7.5 \text{*} D_{min}$)/ $\sqrt{f} = 7.5 \text{*} 5/\sqrt{2.480} = 23.81 \text{mW}$



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5 Measurement and Calculation

5.1 Maximum transmit power

The BT&WIFI Power Data is based on the RF Test Report SZEM180100017601 & SZEM180100017602& SZEM180100017603.

Test Data:

For BT Classic mode

Test mode	Channel	Peak Power (dBm)	Peak Power (mW)
	2402	2.031	1.60
GFSK	2441	1.141	1.30
	2480	-2.592	0.55
	2402	2.075	1.61
π/4DQPSK	2441	1.126	1.30
	2480	-2.686	0.54
	2402	-1.007	0.79
8DPSK	2441	-2.009	0.63
	2480	-4.685	0.34

For BT BLE mode

Test mode	Channel	Peak Power (dBm)	Peak Power (mW)
	2402	0.662	1.16
GFSK	2440	-0.01	1.00
	2480	-2.3	0.59

For WiFi

Test mode	Test Frequency (MHz)	Average Power (dBm)	Average Power (mW)
802.11b	2412	7.18	5.22
	2437	7.34	5.42
	2462	7.17	5.21
802.11g	2412	7.21	5.26
	2437	7.31	5.38
	2462	7.12	5.15
802.11 n(HT20)	2412	6.93	4.93
	2437	7.05	5.07
	2462	7.11	5.14

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5.2 RF Exposure Calculation

The Max Conducted Output Power is 5.42mW, so the SAR report is not required.

--End of the Report--

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